

# Too Much Information?

*Investors and corporations could benefit from less frequent financial reporting.*

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**T**he Securities and Exchange Commission requires public companies to report their earnings and a variety of other financial statistics every three months. The requirement is intended to provide investors with timely data to help them make informed investment decisions.

Financial economists have long questioned the practice, wondering if it really does serve the interests of investors. There are reasons to think it does not. For starters, producing earnings data often is costly both to investors and the firms, and it is unclear whether the incremental value of the second, third, or fourth earnings report in a year is worth the incremental cost of producing it.

Second, there is evidence that providing earnings data every three months may be counterproductive. Such frequent reporting may engender a myopia among managers, encouraging them to focus on achieving quarterly profit targets to the detriment of long-run profits.

Third, the frequent reporting of earnings may create noisier data. Isolated events that significantly affect profits in one quarter may cause investors to overreact. The complementary fear is that companies may take steps to “smooth” these ephemeral fluctuations, either via accounting gimmicks (thereby rendering the data less relevant) or by making real changes to the company’s operations that potentially reduce long-term profits.

Finally, the quarterly reporting of earnings data may crowd out the release of ancillary, relevant information. In a world where managers want to keep investors fully informed of their companies’ fiscal health, trading off the frequent and voluntary provision of relevant data for mandatory (and costly) quarterly reporting may not be in investors’ best interests.

The effect of frequent reporting periods can manifest in various ways. For instance, the strictures that quarterly reporting places on the management of public companies are one reason why start-up companies and their investors have been content to

eschew initial public offerings (IPOs) and remain privately held for a longer period than was the case in the 1980s or 1990s. The 10 years Uber spent as a “unicorn”—a highly valued, privately held firm—can be attributed in part to the desire to avoid the additional costs of quarterly reporting.

The costs of being a public corporation have gone up in the last two decades. The Sarbanes–Oxley Act significantly increased reporting costs for public corporations, reducing new IPOs. The 2010 Dodd–Frank Act includes several expensive rules, including “conflict mineral” reporting and chief executive officer compensation disclosure. (See “The Meaningless of the SEC Pay Disclosure Rule,” Spring 2014.) These requirements help to explain why the ratio of private IPOs (that is, non-public capital fundraisings) to public IPOs has increased significantly since 2000.

The SEC recently indicated that it would study whether to reduce earnings reporting to semi-annual or even annual events. Reporting frequency differs between Europe and North America and has also changed various times in the United States since the 1950s, providing data with which to study the issue. The research suggests that a reduction in reporting periods is well worth considering.

## REPORTING FREQUENCY MAY ABET MANAGERIAL MYOPIA

The most common criticism of quarterly reporting is that it leads to managerial “short-termism” whereby firms place an excessive emphasis on achieving short-run earnings goals at the expense of long-run growth. A firm preoccupied with satisfying financial markets every three months may be tempted to reduce productive long-term investments elsewhere—such as research and development—to hit its quarterly numbers.

Blackrock chairman and CEO Larry Fink and former PepsiCo CEO Indra Nooyi advocate releasing earnings every six months, while JP Morgan CEO Jamie Dimon and Berkshire Hathaway CEO Warren Buffett, *eminences grises* of the investment world, have suggested that ending quarterly earnings guidance would be a good first step toward reducing the short-term thinking that too often occurs in the boardroom.

Arguably the most successful public corporation of the 1990s,

General Electric was famous for exceeding analysts' expectations by a penny a share each quarter for years at a time. That was one of the reasons it became the most valuable company in the world. However, its obsession with attaining positive quarterly earnings surprises ultimately hurt shareholders as the firm devoted much more effort to accounting chicanery than to producing long-term growth. In the 1990s, it typically used carefully timed capital gains and restructuring charges and reserves to smooth earnings. When GE's profitability started to go south, it relied on more costly measures to maintain its earnings growth. At one point it began giving deeply discounted service contracts to customers that paid up-front or agreed to a lengthy extension, and its capital expenditures have fallen significantly each year since 2015. In the last decade, GE has suffered a series of setbacks that have eroded more than 70% of its market cap, resulting in it being removed from



the Dow Jones Industrial Average and almost broken up entirely.

A considerable amount of research finds evidence that frequent reporting requirements beget short-term decision-making or accounting perfidy to the detriment of long-run performance. For instance, one study undertook a cross-country comparison of firms reporting earnings quarterly versus semi-annually before and after the European Union dropped its quarterly Interim Management Statement requirement. It finds that firms required to report earnings more frequently are more likely to manipulate earnings in order to avoid disappointing capital markets.

Manipulating earnings—or expectations—is common. The more a company manages to beat earnings, the more its officers believe they need to continue to do so in the following quarters. That makes them more inclined to manipulate earnings, make economic decisions solely to meet accounting goals, or even violate Generally Accepted Accounting Practices to meet profit expectations. Bookings Holdings, the entity that contains Priceline, beat the market's profit expectations 28 times in a row, helped in part by its frequent issuance of profit warnings during that period. The shoe company Caleres met its estimated quarterly earnings one time by decreasing its inventory reserve and recording a periodic benefit income from its pension by assuming an unrealistically high rate of return.

Researchers Arthur Kraft, Rahul Vashishtha, and Mohan Venkatachalam used the U.S. transition from annual to semi-annual reporting in 1955 and from semi-annual to quarterly reporting in 1970 to examine the effect of more frequent reporting on firms' investment levels. They find that a switch to semi-annual and then to quarterly reporting coincided with a significant decrease in investments (1.7% of total assets, 22% of investments) without any demonstrable increases in performance or efficiency.

Renhui Fu, Kraft, Xuan Tian, et al. also find that firms that report more frequently appear to have less corporate innovation as measured by patents applied for, patents received, and the number of citations of a firm's patents. The authors estimate that an increase in reporting frequency for a firm that has patents will see a reduction of two patents, 12 non-self-citations (a measure of the patent's significance), and a \$2.25 million reduction in the value of their patents compared with a firm that does not have an increased number of reporting periods.

#### TOO MUCH INFORMATION OR TOO LITTLE?

Another problem with frequent reporting standards is that it can crowd out the creation of other useful information that would have been provided in its absence. For instance, a company reporting earnings two or three times a year might be more inclined to informally notify investors of events that could potentially affect the company's performance and provide more detailed color on its earnings. Companies would not provide such information out of some notion of altruism, but because investors would find value in such data and be more inclined to invest in companies that are forthcoming.

## SECURITIES &amp; EXCHANGE

Even if quarterly earnings data do have a modicum of value to investors, it may not be cost-effective to require this reporting. Because reporting might crowd out other useful data that firms would otherwise produce, we should compare the cost of producing the report to its net value—its relative usefulness minus the potential benefits gained from additional voluntary disclosures. That number may not be much different from zero—and below the cost to firms to produce it and the potentially bad incentives it engenders.

Quarterly earnings statements may also create unintended incentives for trading in the capital markets that regulators would prefer to avoid. For instance, each time the firm releases information to the public that was previously known only to the firm, it provides an opportunity for sophisticated traders to generate private (and socially valueless) information before interacting with less-well-informed investors and exploiting the average investor who is not privy to such information.

Several studies have examined the interaction between public information releases and incentives for short-term trading. For instance, Maureen McNichols and Brett Trueman show that information asymmetry may increase prior to and during predictable information events—such as quarterly earnings statements—if those events induce private information acquisition prior to public disclosure. In other words, more frequent mandatory reporting periods may create more opportunities for sophisticated traders to participate in pre-announcement information production and trading, and trade out of their positions immediately after the announcement. If the intent of public information releases is to “level the playing field” among investors, mandating frequent earnings statements may be counterproductive.

Data support this notion. John Campbell, Tarun Ramadorai, and Allie Schwartz find that large institutional traders and algorithmic traders can anticipate both earnings surprises and post-announcement earnings drift better than “Main Street” investors. Alex Frino et al. find that algorithms react faster and more correctly in the immediate aftermath of earnings announcements than non-algorithmic traders and time their trades better as well, making them more profitable than non-algorithmic traders in that interval. Oliver Kim and Robert Verrecchia conclude that public disclosures may generate information asymmetry among traders who are differentially able to process the disclosures. In other words, frequent reporting may be putting Main Street investors at a disadvantage to hedge funds and others with a plethora of information—the precise opposite of its intent.

Other research examines the interaction between mandated reporting, voluntary guidance by managers, and private information production. Frank Gigler and Thomas Hemmer examine the relation between mandated and voluntary reporting and the efficiency of stock prices by comparing periodic mandated disclosure with voluntary management guidance. They argue that mandatory disclosure is a noisy signal of managerial information and is less timely than manager insights given voluntarily. Less frequent, mandated reporting is superior if the management can

disclose material information at its discretion.

Kenton Yee finds that increasing the frequency of mandated reporting causes the amount of redundant private information production to rise because there are more opportunities to trade in advance of public disclosure. Redundant private information is socially wasteful because people and firms devote resources to produce it and it does not benefit investors writ large.

There is also evidence that quarterly reporting crowds out other useful information. For instance, Suzie Noh, Eric So, and Joseph Weber find that voluntary guidance fell with the imposition of mandatory 8K filings. That led them to conclude that mandatory reporting is a substitute for management’s provision of timely, relevant data.

Douglas Howell, the chief financial officer for insurance brokerage Arthur Gallagher, told the SEC in a comment that the “quiet month” that customarily precedes each report (at the behest of the SEC) makes it more difficult for firms to have regular interactions with investors. He suggested that a move to tri-annual reporting would allow investors to better maintain contact with companies in which they have invested.

### RANDOMNESS IN THE DATA

Another drawback of quarterly reporting is that, because three months is such a short period of time, a great deal of randomness will affect the reports. For instance, a single, sizable sale might distort earnings in a quarter, or a large or unexpected contingency (such as a pandemic) may produce an anomalous loss in a quarter. However, in four months, six months, or a year those anomalies are more likely to even out. The shorter the period, the noisier the data and the more difficult it is for investors to interpret.

Consider the experience in China for the recent novel coronavirus outbreak. The country imposed strict quarantine protocols toward the end of January 2020, shuttering many businesses—including all Apple stores in the country—in early February for nearly six weeks. With a September fiscal year-end, Apple’s first-quarter numbers in China were not seriously affected by the outbreak, its second quarter numbers will reflect very few sales before the shutdown, and its third and fourth quarter numbers will depend on how quickly the public resumes spending and the country’s progress in combating the virus. Although the yearly numbers are likely to be depressed relative to a “normal” year, the annual figures are likely to be less affected by the outbreak than the second quarter numbers. And, to the extent that there is pent-up demand that is fulfilled in the third and fourth quarters, the year may even appear to be close to “normal.”

It is instructive that while the International Accounting Standards Board details the type of information firms should disclose, it pointedly declines to mandate a reporting frequency. Instead, it leaves that to “national government, regulators, stock exchanges, and accounting bodies,” in effect acknowledging that the frequency decision requires a tradeoff between reporting timeliness and reporting accuracy. If the frequency did not affect accuracy,

then the total volatility of stock prices reacting to this information over longer periods would be unaffected by reporting frequency.

Cross-country comparisons find that countries that report earnings more frequently exhibit more long-term stock-price volatility. Yah Mensah and Robert Werner discern greater stock price volatility in U.S. and Canadian firms reporting earnings quarterly compared to United Kingdom and Australian firms that report semi-annually. *Ceteris paribus*, more frequent reporting gives investors more timely but noisier data.

Noisiness might be an acceptable price to pay if more frequent reporting leads to new information being incorporated more quickly into stock prices, but that does not appear to be the case. Marty Butler, Robert Kraft, and Ira Weiss use the U.S. transition to semi-annual and quarterly reporting in 1955 and 1970 to discern whether these mandates sped up the incorporation of new data into the market. They find no evidence of it. Interestingly, they do find that the firms that voluntarily adopted quarterly reporting well before the 1970 mandate saw increased pricing efficiency. Firms apparently will choose the reporting frequency that is best for their situation—another argument for choosing a reporting regime that does not crowd out private information.

#### ARE DISCRETE REPORTING INTERVALS OBSOLETE?

Investor and writer Barry Ritholz once suggested, only partly tongue-in-cheek, that a solution to the yoke of reporting quarterly earnings would be to require firms to report data daily. If firms provided all relevant data as quickly as possible, he argued, then the market could decide how to aggregate it.

That is not a crazy idea. The U.S. Bureau of Economic Analysis and Bureau of Labor Statistics are experimenting with providing data to investors and academics more frequently than their regular monthly or quarterly forecasts. Raj Chetty has shown that it is now possible to track economic activity amid the pandemic on a day-by-day basis. However, the motivation behind each of these data sets is to *supplement* and not replace regular data releases.

Investors want firms to provide a modicum of standardized, relevant data on a regular basis. If the SEC did not require firms to do this quarterly, the firms would still provide investors with timely information to help the investors discern a firm's financial health.

There is evidence that the current status quo for reporting earnings data every three months tends to benefit knowledgeable investors to the detriment of others. It also creates counterproductive incentives for firms to either manipulate their earnings data or—far worse—to make economic decisions solely for the purpose of meeting short-term earnings targets. What's more, the marginal benefit that quarterly earnings reports provide investors may be negligible because, if the requirement were dropped, firms would rationally increase the provision of other relevant data in order to keep investors up to date and comfortable investing in their company. The one-month quiet period between a company and its investors before each earnings release especially inhibits such communications.

Reducing the reporting of earnings data to one, two, or even three times a year would ultimately result in a regime that is more equitable for all investors and provides more useful information at a lower cost. In fact, tri-annual reporting may be the tractable compromise that satisfies all parties. In any event, the SEC is right to consider such a change. R

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